

THE CONSERVATION OF THE TERRESTRIAL VERTEBRATES FROM THE PROTECTED AREAS AND NATURAL RESERVES OF MOLDAVIA

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The studied area is located in eastern part of Romania and comprises all natural reservations from districts of Moldavia. Our studies reveal the present situation of the flora, vegetation and the terrestrial vertebrates fauna on every natural reservation and protected areas. In the present paper we discuss of the biodiversity of terrestrial vertebrates species, included in I.U.C.N. the Red List for Romania.

Introduction

Between 1994-2001 a group of botanists and zoologists from the University "Al. I. Cuza" Iasi undertook a vast study that comprised all the natural, floristic, forest, zoological and landscape reservation from the departments of Galați, Vrancea, Vaslui, Bacau, Neamt, Suceava, Botoșani and Iași. Local or governmental laws protect all the reserves that have been studied.

Materials and Methods. For each reserve we made shifts in the lands (fields) in different periods of the year in order to observe the succession of the vegetation and to complete, as exhaustive as possible, the floristic and fitocoenological inventory. The working methods consisted of itineraries; some transects of vegetation were also made. At some time the fauna was also inventoried in order to complete our study.

In the case of terrestrial fauna we presented the data taking into account the existent biodiversity and pointing on the species that are on The Red List of I.U.C.N. based on the criteria of the International Union of Conservation of Nature and Natural Resources in 1994 and according to the Bern Convention in 1979. We have also taken into account the agreement concerning the Protection of Euroasiatic Migratory Water Birds adopted at Hague on the 16th of June 1995 and The Status of The Conservation of the Species of Birds in Europe elaborated by BirdLife International in 1994- Federation that is in charge the Protection of birds. In the end we made evaluations about the status of conservation in each reservation.

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Results and discussion.

Flora and Vegetation. The natural reserves from the Department of Galati are submitted to a strong anthropo-zoogenous impact due to the fact that they are situated near either urban conglomerations (the case of the Garboavele Forest situated near the town of Galati where a chaotic and uncontrolled tourism is practised, the forest being also a place of recreation for the people of Galati) or near villages (the reservation of Breana- Roscani, Pogonesti-Suceveni and Hanul Conachi).

It is stated that today, the floristic and fitocoenological biodiversity is unaltered, but in some places a certain type of alteration has begun that is some weeds started to appear and in the future they could become threats for the flora and vegetation specific to this protected areas. In order to continue, to preserve this reservations as unaltered as possible, severe measures should be taken their including supervision and restriction of natural increase of some wooden species. (For example *Robinia p.* in the Hanul Conachi reservation or *Acer negundo* in the Garboavele reservation) or of some herbaceous species that become weeds.

All these four natural reserves from the Department of Galați have a flora and vegetation typical for the area of silvosteppe, which is characteristic for the respective zone. Many vegetal species or vegetal associations are rare for our country and the forests have a major role in preserving the biodiversity in this region.

In the Department of Vrancea there have been studied 13 natural reserves: floristic, faunistic, forest, landscape of mixed type. All there reserves are situated in a typical forest zone in submontaneous, montaneous, and subalpine belt (eg. Goru Peak). The forests are typical for this zone of vegetation, being represented by Spruce Fir mixed with Pure Fir, Beech, or mixed forests. In the natural reservation of the Goru Peak we can also meet Juniper (*Pinus mugo*); it is the only a natural reserve in the department were this species exists.

Due to the fact that all the reservations are situated far from the big cities, they are well preserved, keeping thus the floristic, fitocoenological, and faunistic biodiversity for which they have been declared reservation.

In the Vaslui Department the seven natural reservations that have been studied are under national laws (or local laws) and they represented either islands of the natural silvosteppe vegetation of the Central Moldavian Plateau (forest reservations) or patches of natural steppe vegetation. The reservations constitute refuges of floristic rarities for our country (*Caragana frutex*, *Ephedra distachya*, *Bellevalia sarmatica*) and of some rare associations for the vegetation of Romania (associations with *Quercus pedunculiflora*, *Q. daechampii* or *Quercus pubescens*, typical steppe associations: *Meoticojoria- Festucetum valesiaca*, *Botrichloetum ischaemi*, *Stipetum capillatae*).

In the Department of Bacau six nature reserves have been studied ; forest, floristic, landscape, zoological or mixed type.

The vegetation of these reserves is made of either pure Spruce Fir or mixed with foliate or Beech, sometimes with *Quercus dalechampi*.

We can also see ,on small areas ,associations of rocks, mountain bogs and fitocenoses with junipers on the Sandru Mare Peak in the Nemira Mountains. In the Nemira Mountains at Izvorul Alb Darmanesti we can meet also *Taxus baccata* , situated at the same level with the Beech ,with remarkable specimens reaching almost 17 metres in height .The Nemira Mountains are the only region in our country where the species *Saxifraga cymbalaria* grows.

Some of the reserves have a protection role for the affluents that border the localities in which they found. Some examples could be the reservations of Magura and Fetele Targului near the town of Targu Ocna .

The study of Bacau Department reservations revealed their floristic richness, the existence of some species that are both for this region and for our country, and the great diversity of types of vegetation. Thus, we may say that the conservation status of all the reservations is good.

In the Department of Neamt we have studied twelve natural reservations of the following types: forest, floristic, landscape or mixed.

In these reserves there are some vegetal species considered rare or even endemic for the Romania' flora such as: *Astragalus pseudopurpureus* in the natural reservation Cheile Sugaului; *Silene zawadskii*, *Campanula carpatica* and *Hieracium pojoritense* in Cheile Sugaului ; *Taxus baccata* in Cheile Biczului, at Pangarati and in Padurea Gosman Tarcau; *Larix decidua* ssp. *carpatica* at "Polița cu crini" from Ceahlău Mountains; *Seseli hippomarathrum* in the natural reservation situated in the village Dumbrava Rosie the only place of existence from our country, and so on.

In the nature reserves we can find out some unique or rare vegetal communities for the vegetation of our country, such as: *Thymo pulcherrimi-Poetum rehmannii* , and *Seseli gracile – Festucetum pallentis* in Cheile Biczului ;*Pulmonario rubrae-Fagetum*, *Taxetosum baccata* in Pangarati,Gosman-Tarcau and Padurea Nemptisor; *Saxifraga cuneifoliae-Laricetum* in Ceahlau; *Artemisio baumgarteni-Gypsophiletum petraea*, *Saxifraga luteo-viridis-Silenetum zawadzki* and *Juniperetum sahinae* in Cheile Sugaului, etc.

Of all Moldavia's departments, in the Suceava Department we can find the largest number of 27 natural reservations, which are situated in all areas and belts of vegetation of these territories.

All these reserves preserve an extremely rich and divers flora, with many floristic elements, endemic or rare in Romania, with interesting and still very little human altered vegetation.

Among such elements of the flora that are extremely valuable, we can mention the following species: *Andryala levitomentosa*, *Campanula carpatica*, *Melampyrum saxosum*, *Pynus sylvestris f. turfora*, *Pinus mugo*, *Pinus cembra*, *Trolius europaeus*, *Ligularia sybirica*, *Ligularia glauca*, *Betula nana*, *Euonymus nana*, *Arctostaphyllos uva-ursi*, *Cochlearia pyrenaica*, *Leontopodium alpinum*, *Cypripedium calceolus*, *Thesium kernerianum*, *Fritillaria meleagris*, *Drosera rotundifolia*, *Andromeda polyfolia*,

Lysimachia thyrsoflora, *Trietalis europaea*, *Carex chordoriza*, *C. loliacea*, *Pedicularia sceptrum-carolinum* s.a.

As a result of studying the vegetation in this department, a new scientific coenotaxon was described, that is the association **Eriophora vaginati/ Betulum nanae ass.nov**, whose fitocoenoses were frequently identified along the water flows of the mountain peaks of Mestecaniş. We also evidence the very good status of conservation of all the natural reservations, the Agency for the Protection of the Environment being actively involved in the management of each protected area.

Though in the Department of Iasi the protected areas are not very numerous, these reservations are inhabited by some rare floristic species in our country, such as: *Carpinus orientalis*, *Caragana frutex*, *Quercus pubescens*, *Euonymus nana*, *Orchis purpurea*, *Ulmus laevis*.

Some natural reserves are extremely interesting: the secular hayfields of Ponto-Sarmatian type from Valea lui David, for the typical steppe reservation, secular Beech-Trees (Dealul Mare-Hârlău) for the forest hills, The Forests Catalina- Cotnari, Roşcani, Uricani for silvosteppe forest and the Dealu Repedea reservation for paleontological, botanical and landscape interest.

The Department of Botosani has a smaller number of floristic or forest reserves. In this region there are some species quite rare in Romania such as: *Schivereckia podolica*, in reservation Stâncă Ştefăneşti (the only region of our country in which this species exists); *Taxus baccata*, a species protected by law in Romania, exists in reservation Tudora; the forest Stuhuosa- Suharau has a Secular Beech Forest with selected trees; the forest Vorona as well. The peat bog Dersca is in fact an eutrophic marsh unique for the north of Moldavia, having a characteristic flora. The forest Ciornahal- Calarasi is a typical forest for the northern silvosteppe with *Cotinus coggygia* at the northern limit of the areal in Romania. The lakes Dracşani-Suliţa and Ezer-Dorohoi represent humid important areas for the conservation of the specific aquatic and paludous flora and fauna.

To all these nature reserves we can also add the “Codrul Eminescian” from Ipoteşti, preserved for the memory of our great poet, where there is an authentic landscape, reflected in many of his poems.

The fauna. In our present study we have included only the results that refer to the terrestrial mammals, birds, reptiles and amphibians.

According to the criteria of the International Union of the Conservation of Natural Resources (IUCN), 1994, the European terrestrial vertebrates that are on The Red List can be grouped after the following categories: critically endangered (CR); vulnerable (VU); endangered (EN); with low risk (LR); data deficient (DD).

a. Species critically endangered (CR): Birds- *Numenius tenuirostris*, Reptiles- *Vipera ursinii*

b. Vulnerable (VU): Mammals, order Chiroptera- 7 species: *Rhinolophus euriale*, *Rhinolophus hipposideros*, *Rhinolophus mehelyi*, *Barbastella barbastellus*, *Myotis bechsteini*, *Myotis capaccinii*, *Myotis emarginatus*, order Carnivora- 1 specie:

Vormela peregusna; order Rodentia- 6 species: *Spermophilus suslicus*, *Mesocricetus newtoni*, *Spalax graecus*, *S. leucodon*, *Eliomys quercinus*; Birds, order Pelecaniformes- 1 specie: *Pelecanus crispus*; order Anseriformes-4 species: *Anser erythropus*, *Aythya nyroca*, *Branta ruficollis*, *Oxyura leucocephala*; order Falconiformes- 3 species: *Aquila heliaca*, *Aquila clanga*, *Falco naummani*; order Gruiformes- 2 species: *Crex crex*, *Otis tarda*; Reptiles, order Testudines- 1 specie: *Testudo graeca*.

c. Endangered (EN): Mammals, order Carnivora- 1 specie: *Mustela lutreola*, order Artiodactyla- 1 specie *Bison bonasus*; Reptiles, order Serpentes- 1 specie: *Vipera ursinii*.

d. Low risk (LR): Mammals, order Chiroptera- 6 species: *Rhinolophus ferrumequinum*, *R. blasii*, *Miniopterus shreibersii*, *Myotis myotis*, *Nyctalus lasiopterus*, *N. leiseri*, order Rodentia- 10 species: *Sicista betulina*, *Chionomys nivalis*, *Micromys minutus*, *Microtus tatricus*, *Mus spicilegus*, *Dryomys nitedula*, *Muscardinius avellanarius*, *Myoxus glis*, *Sciurus vulgaris*, *Cricetulus migratorius*; Birds, order Pelecaniformes- 1 specie: *Pahalacrocorax pygmaeus*, order Falconiformes- 2 species: *Circus macrourus*, *Haliaeetus albicilla*, order Gruiformes- 1 specie: *Tetrax tetrax*, order Charadriiformes- 2 species: *Glareola nordmanni*; Amphibians: order Anura- *Bombina bombina*, *Hyla arborea*, order Urodela: *Triturus cristatus*.

e. Data deficient (DD): Birds- order Passeriformes- *Loxia scotica*; Amphibians: order Urodela: *Triturus dobrogicus*.

In table 1 we synthetized the number of terrestrial vertebrate species for each department.

In the case of the departments of Botoșani and Iași, we also included as protected area the Valley of Prut River, state border with Republic of Moldavia, which is inhabited by a number of species of birds. In addition an ample research of Prut River drainage basin resulted in a Ph. D. thesis (1). We can find a similar situation in the departments of Bacău and Neamț where the ornithofauna was studied for a period of 30 years, here being included the storage lakes on the river Bistrița and that of Middle Siret River Middle course (6).

The list of endangered vertebrate animals (IUCN) includes birds such as *Otis tarda* (vulnerable) and *Tetrax tetrax* (low risk species). It is worth mentioning that these two species disappeared from Romania's fauna. Only *Otis tarda* appears accidentally in the west of the country and Dobrogea. *Tetrax tetrax* appears very rarely in Dobrogea.

With regard to the protected terrestrial vertebrates from Moldavian natural rezerves, we have to say that, there are species that, in our country, have become rare or critically endangered that are not included in the IUCN Red List, 1994. This is the case of Grouse- *Lyrurus tetrix* from the Rodna Muontains, then there are vulnerable species such as the Crane-*Grus grus*, Black-Winged Stilt- *Himantopus himantopus*, Avocet-*Recurvirostra avosetta*, Black Stork- *Ciconia nigra*, Three-Toed Woodpecker- *Picoides tridactylus*, Stock Dove- *Columba oenas*, Warbler- *acrocephalus scirpaceus* etc.

Some birds considered as vulnerable in Europe can be found as hatching birds in the humid areas of the Prut basin, but they are in small number. This is the situation

of: *Ardeola ralloides*, *Platalea leucorodia*, *Ardea purpurea*, *Coracias garrulus*, *Merops apiaster*, *Luscinia svecica cyanicula*.

If we have a look at the Statute of the Conservation of the Species of Birds in Europe, 1994 (BirdLife Conservation, Series no. 3) (11) and then we refer to the species of birds from the studied areas of Moldavia, we can consider: *Platalea leucorodia*, *Circus macrourus*, *Aquila clanga*, *Aquila heliaca* as endangered; *Phalacrocorax pygmaeus*, *Botaurus stellaris*, *Ixobrychus minutus*, *Ardeola ralloides*, *Ardea purpurea*, *Ciconia ciconia*, *Tadorna tadorna*, *Tadorna feruginea*, *Anas querquedula*, *Aythya nyroca*, *Milvus migrans*, *Falco vespertinus*, *Lyrurus tetrrix*, *Perdix perdix*, *Coturnix coturnix*, *Crex crex*, *Grus grus*, *Scolopax rusticola*, *Limosa limosa*, *Bubo bubo*, *Asio flammeus*, *Lullula arborea*, *Alauda arvensis*, *Anthus campestris*, *Phoenicurus phoenicurus*, *Hippolais palida*, *Emberiza cia*, *Emberiza hortulana*, *E. melanocephala* as vulnerable.

Referring to the animal of cynegetic interest, we must say that the international and national agreements as well as the existent legislation are not sufficient for the protection of many species. We can see that in the major parts of big game (Red Deer, Roe Buck, Bear, Wild Boar) the real effective is under the optimal one. The main causes are: the cutting down of large forest areas, the diking of some large humid areas, the disregard of environment laws, the roads building, and the non-ecological tourism.

Among herbivorous mammals, the Red Deer and the Roe Buck must be protected also in the future. The Black Goat was colonized in the Ceahlău and Vrancea Mountains where it has a good natural growth. Among the carnivorous mammals: the Lynx, the Wolf and Badger have become rare and therefore severe protection measures must be taken; the Otter is met only on the Prut Valley and the Wild Cat (*Felis silvestris*), rare enough, appears in the forests of Bucovina. Among rodents, the Marmot (*Marmota marmota*) is met in the Rodna Mountains and it is a species protected by law.

Among the birds of cynegetic interests, the Hazelhen (*Tetrastes bonasia*) appears on the list of the birds that can be hunt but in reality this species is now very rare and must be protected by law.

As we can see from Table no. 3, the **Mammals** that belong to the Red List, present in the protected areas from the departments of Moldavia are: order Chiroptera- 2 vulnerable species: *Rhinolophus hipposideros*, *Barbastella barbastellus* and 3 with low risk species: *Rhinolophus ferrum-equinum*, *Myotis myotis*, *Miniopterus schreibersi*; order Artiodactyla- one endangered species: *Bison bonasus* appears in a reservation from the Department of Neamt (Vanatori Neamt); order Rodentia- 3 low risk species: *Sciurus vulgaris*, *Muscardinius avellanarius*, *Glis (Myoxus) glis*.

The Birds on the Red List are: order Pelecaniformes- 1 low risk species: *Phalacrocorax pygmaeus*; order Anseriformes- 3 vulnerable species: *Anser erythropus*, *Aythya nyroca*, *Branta ruficollis*; order Falconiformes- 2 vulnerable species: *Aquila clanga*, *Aquila heliaca* and 2 low risk species: *Circus macrourus*, *Haliaeetus albicilla*; order Charadriiformes- 1 low risk species: *Gallinago media*.

The Reptiles on the Red List comprise: *Vipera ursinii moldavica*, as critically endangered and: *Vipera ursinii*; as endangered. There is also a species of turtle- *Emys orbicularis* with low risk.

The Amphibians from the Red List comprise two species of Anura order, with low risk: *Bombina bombina* and *Hyla arborea* and a species from Urodela order, with low risk: *Triturus cristatus*.

Taking into account also the Bern Convention, 1979, referring to the “Wild Life and Natural Habitats Convention”, we can motivate that the Red List is much more complete, almost all the existent species are being included.

Our results are compared to the I.U.C.N. Red List, drawn up on the I.U.C.N. criteria, which is more recent and which comprise more and better defined categories.

Conclusions.

1. The vertebrate terrestrial animals existing in the protected areas, reservations and zone from Moldavia, find themselves in a status of conservation similar to the general parameters of the whole Europe.

2. Among the characteristics of the studied area we indicate the disappearance of some species of birds as *Otis tarda* and *Tetrax tetrax*.

Black Grouse (*Lyrurus tetrix*) is critically endangered because of the small number of individuals existent in the mountain area.

3. Many vertebrate animals decreasing populations are the result of the anthropic impact that destroyed many natural habitats (making agriculture, tourism, hunting, forest exploitation, pisciculture, diking, extractive industry).

4. Concerning the quantitative and qualitative component of the fauna, we consider that further studies are needed, in order to render a more real image of all the species situation and to reason the species listing in the Conservation Statute.

Table no 1. The terrestrial vertebrate from the natural reservations and protected areas

Class	Number of species (number of protected species)							
	Galati	Vrancea	Vaslui	Bacau	Neamt	Suceava	Botosani	Iasi
Amphibians	10 (3)	11 (3)	9 (3)	14 (3)	14 (3)	12 (3)	13 (3)	12 (3)
Reptiles	8 (1)	6 (1)	7 (1)	10 (1)	10 (1)	9 (1)	9 (2)	9 (2)
Birds	108 (1)	142 (1)	120 (5)	198 (4)	198 (4)	186 (4)	192 (9)	220 (10)
Mammals	22 (1)	32 (5)	18 (3)	44 (10)	44 (10)	42 (9)	36 (3)	42 (8)
Total	148 (6)	191 (10)	154 (12)	266 (18)	266 (18)	249 (17)	250 (17)	293 (23)

Tabel no 2 The protected species from the natural reservations of Moldavia belonging to the Red List

Department and no. of species	Classes of terrestrial vertebrates	Species included in the Red List
Galati 6 species	Mammals	<i>Sciurus vulgaris</i>
	Birds	<i>Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Vrancea 10 species	Mammals	<i>Rhinolophus hipposideros, Sciurus vulgaris, Mus spicilegus, Muscardinius avellanarius, Glis (Myoxus) glis</i>
	Birds	<i>Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Vaslui 12 species	Mammals	<i>Sciurus vulgaris, Spalax leucodon, Muscardinius avellanarius</i>
	Birds	<i>Phalacrocorax pygmaeus, Aythya nyroca, Aquila clanga, Aquila heliaca, Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Bacau 8 species	Mammals	<i>Sciurus vulgaris</i>
	Birds	<i>Aquila clanga, Aquila heliaca, Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Neamt 18 species	Mammals	<i>Rhinolophus ferrumequinum, Rh. hipposideros, Miniopterus schreibersi, Myotis myotis, Barbastella barbastellus, Bison bonasus, Sciurus vulgaris, Dryomys nitedula, Muscardinius avellanarius, Glis glis</i>
	Birds	<i>Aquila clanga, Aquila heliaca, Circus macrourus, Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>

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	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Suceava 13 species	Mammals	<i>Rhinolophus ferrumequinum, Rh., hipposideros, Miniopterus schreibersi, Myotis myotis, Barbastella barbastellus Sciurus vulgaris, Dryomys nitedula, Muscardinus avellanarius, Glis glis</i>
	Birds	<i>Aquila clanga, Aquila heliaca, Circus macrourus, Crex crex</i>
	Reptiles	<i>Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Botosani 17 species	Mammals	<i>Sciurus vulgaris, Muscardinius avellanarius, Glis glis</i>
	Birds	<i>Anser erythropus, Aythya nyroca, Oxyura leucocephala, Aquila clanaga, Aquila heliaca, Circus macrourus, Haliaeetus albicilla, Crex crex, Gallinago media</i>
	Reptiles	<i>Vipera ursinii moldavica, Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>
Iasi 23 species	Mammals	<i>Rhinolophus ferrumequinum, Rh., hipposideros, Barbastella barbastellus, Miniopterus schreibersi, Myotis myotis, Sciurus vulgaris, Muscardinius avellanarius, Glis glis</i>
	Birds	<i>Phalacrocorax pygmaeus, Anser erythropus, Aythya nyroca, Oxyura leucocephala, Aquila clanaga, Aquila heliaca, Circus macrourus, Haliaeetus albicilla, Crex crex, Gallinago media</i>
	Reptiles	<i>Vipera ursinii, Emys orbicularis</i>
	Amphibians	<i>Bombina b., Hyla arborea, Triturus cristatus</i>

Tabel no 3. The General situation of the terrestrial vertebrates

Total no. of species existing on the earth	Total no. of species in Romania	Total no. of species from the reservations of Moldavia	No. of endangered species in Europe	No. of endangered species in the reservations of Moldavia
Mammals 4100 species	91 species	44 species	Chiroptera-13species vulnerable 7 low risk 6 Carnivora- 2 species vulnerable 1 endangered 1 Artiodactyla- 1 species endangered 1 Rodentia- 16 species vulnerable 6 low risk 10	Chiroptera- 5 species vulnerable 2 low risk 3 Artiodactyla- 1 species endangered 1 Rodentia- 3 species low risk 3

Birds 8860 species	388 species	228 species	Pelecaniformes-2 species vulnerable 1 low risk 1 Anseriformes-4 species vulnerable 4 Falconiformes- 5 species vulnerable 3 low risk 2 Gruiformes- 3 species vulnerable 2 low risk 1 .	Pelecaniformes 1 species low risk 1 Anseriformes 3 species vulnerable 3 Falconiformes- 4 species vulnerable 2 low risk 2
8860 species	388 species	228 species	Charadriiformes- 3 species critically endangered 1 low risk 2 Passeriformes- 1 species data deficient	Charadriiformes- 1 species low risk 1
Reptiles 6046 species	24 species	10 species	Serpentes- 2 species critically endangered 1 endangered 1 Testudines- 3 species	Serpentes- 2 species critically endangered 1 endangered 1 Testudines- 1 species

			endangered 1 low risk 2	low risk 1
Amphibians 4020 species	17 species	14 species	Anura- 2 species low risk 2 Urodela- 2 species low risk 1	Anura- 2 species low risk 2 Urodela- 2 species low risk 1

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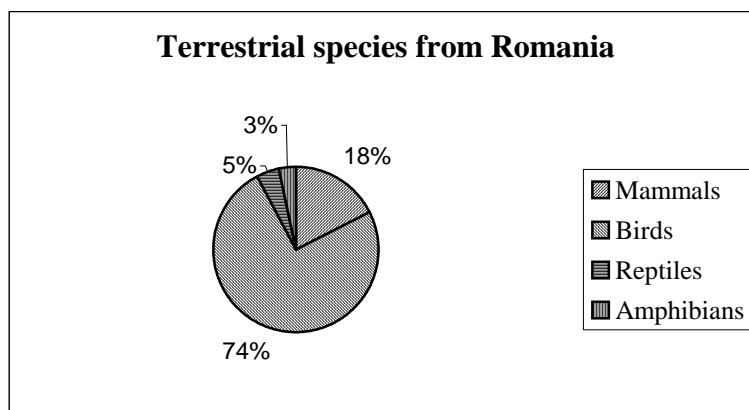


Fig. 1 Terrestrial species from Romania

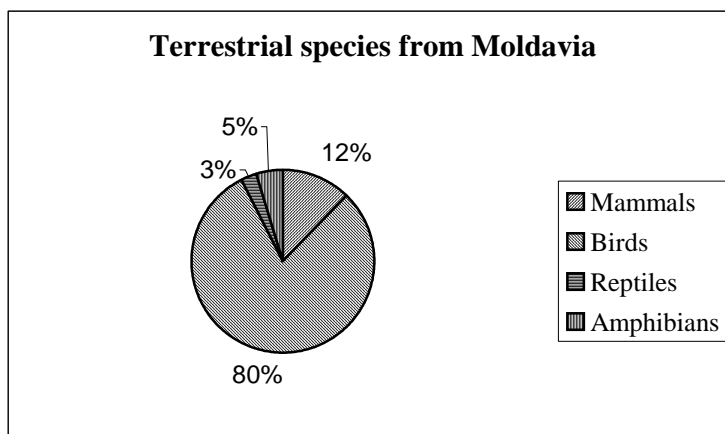


Fig. 2. Terrestrial species from Moldavia

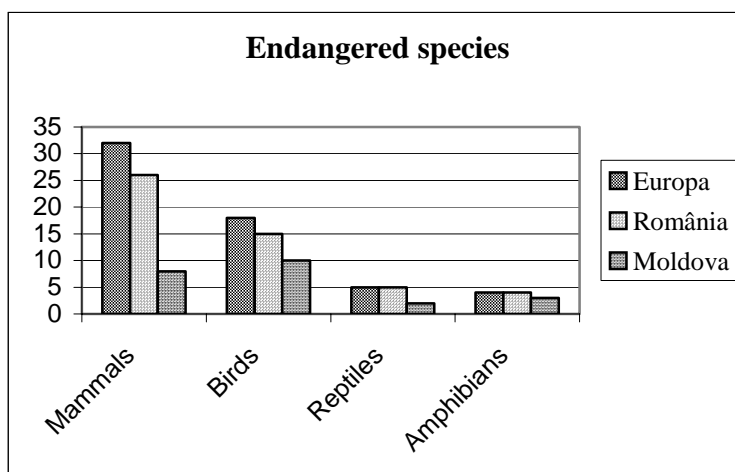


Fig. 3. Endangered species